

Dear Fellow Board Members,

I regret that I cannot make the September 16th SWAC meeting. In the past 8 years serving on the board this will be the only meeting I will have missed. The reason for not being able to attend is that I am presenting at the SWANA Evergreen Chapter in Spokane. The session is called "Greenhouse Gas Emissions: Solid Waste's Role and Impact". I was humbled when asked to present about "WTE vs. Landfill GHG calculations".

I am planning on being back for the October meeting (as a 'visitor').

Since joining the board 8 years ago, I have seen some good changes and encourage the board to put more emphasis than ever on moving away from landfilling of untreated waste and take all efforts in working toward, and building an infrastructure that is much more sustainable by developing and promoting better recycling practices and the technologies that are readily available to turn for example certain plastics into secondary raw materials (we, Neomer, are working with companies that have developed and are successfully using this technology) and to collect paper & cardboard and glass separate from the other recyclables.

During the summer, I went to Europe and got yet another great insight into the well working recycling operations of Germany and Switzerland. Paper and glass are separately collected in both countries with a huge rate of successfully recovering and actually recycling these materials vs. having a single bin for all recyclables, trying to separate them and then exporting these as cross-contaminated low quality recyclables to countries like China where the real recycling rate of these materials is very low.

Regarding Paper Recycling please see recent interview with Shawn State, Southern Region - Recycling Division at Pratt Industries:

Waste360 recently spoke with Shawn State, Senior Vice President of the Southern Region recycling division at Pratt Industries —a leading paper, packaging, and resource recovery company.

Shawn will be speaking at the upcoming Recycling Summit's "Is Mixed Waste Processing Dead?" panel. Please enjoy this sneak peek into what promises to be a great session!

**Q: How would you define mixed waste processing?**

**A:** For me, mixed waste processing is the act of bringing municipal solid waste into a facility and trying to pull recyclables out of it.

**Q: Over the years, how have you seen mixed waste processing change?**

**A:** It has not worked in the U.S., and there's not a successful model that I'm aware of that is pulling recyclables. The materials just aren't as clean as they need to be for the end user. The technology hasn't changed much in the last 10 years, and there isn't a technique I'm aware of that is capable of cleaning the material to the point where you can mix it with mixed waste and still sell the recyclables to the end markets.

The Recent ranking of the World's top sustainable cities <https://www.arcadis.com/en/global/news/latest-news/2016/09/zurich-revealed-as-most-sustainable-global-city/> further supports the efforts by Switzerland (taking #1 Spot) and Germany (taking Spots 6, 8 and 10). Singapore, Stockholm, Vienna, London, Seoul and Prague round up the top 10. The US most sustainable City is Boston (# 34) followed by San Francisco (# 39) and Seattle (#43).

A recent investigative report <http://www.zdf.de/ZDFmediathek/beitrag/video/2824102/Giftiger-Export#/beitrag/video/2824102/Giftiger-Export> (unfortunately only in German) by the German Government also looked at the recycling of

electronics and found that the majority of electronics, despite extensive supportive efforts still ended up in countries like Ghana where for example car batteries are chopped up with machetes, the acid is drained into the ground and washed into the Ocean and only the metal/lead is recovered. Further, most of the electronics are burned openly to recover the precious metals. Life expectancy at these massive electronic graveyards is 5-10 years. The same applies to US Electronics.

It is very important that we keep electronics out of our transfer stations or mandate that they are put into recycling containers that end up at companies like Total Reclaim. To be able to make sure that these items are adequately recycled we need to account for the true cost of recycling and we either need to increase the fee for each ton of 'waste' going to landfill by a substantial amount to reflect the true cost of landfilling (such as lost resources and environmental impact of landfills) or we need to ban materials that have a larger than 3% TOC (Total Organic Content) from landfills. Both models have proven to be very successful. In the countries that have implemented either one of these solutions recycling rates are substantially higher (and accountable) than in countries that have not taken this step. In addition, waste production and environmental impact are lower while revenues and employment for the cities and companies are higher. King County Executive Dow Constantine set a goal of 70% recycling by 2020. That goal is only achievable if we implement either one of the two options. Otherwise we will not reach that goal, especially as most of our 'recyclables' end up going to China without actually being recycled.

On that note, I recently had to change my fire-detectors (They need to be changed at least every 5-10 years – depending on make and model). Did you know that they contain small amounts of radioactive materials? Again, we need to have adequate handling of these materials in addition to recycling the electronic components etc.

I wish the Board success in the coming year in obtaining a progressive infrastructure. After Avoidance and Recycling, modern state of the art Waste to Energy (WTE) technology, such as Mass Burn, is a viable and better ecologic-economic alternative to landfilling even when best available technology is used.